## **Department of Energy**

§ 429.40

and

(ii) Any represented value of the estimated non-active energy ratio or other measure of energy consumption of a

basic model for which consumers would favor higher values shall be less than or equal to the lower of:

(A) The mean of the sample, where:

$$\overline{x} = \frac{1}{n} \sum_{i=1}^{n} x_i$$

and,  $\overline{x}$  is the sample mean; n is the number of samples; and  $x_i$  is the  $i^{th}$  sample; Or.

(B) The lower 97.5 percent confidence limit (LCL) of the true mean divided by 0.95, where:

$$LCL = \overline{x} - t_{.975} \left( \frac{s}{\sqrt{n}} \right)$$

And  $\overline{x}$  is the sample mean; s is the sample standard deviation; n is the number of samples; and  $t_{0.975}$  is the t statistic for a 97.5% one-tailed confidence interval with n-1 degrees of freedom (from Appendix A of this part).

(b) Certification reports. [Reserved] [76 FR 12451, Mar. 7, 2011; 76 FR 24774, May 2, 2011]

## § 429.40 Candelabra base incandescent lamps and intermediate base incandescent lamps.

- (a) Sampling plan for selection of units for testing. (1) The requirements of §429.11 are applicable to candelabra base incandescent lamps; and
- (2) For each basic model of candelabra base incandescent lamp and intermediate base incandescent lamp, a minimum sample of 21 lamps shall be randomly selected and tested. Any represented value of lamp wattage of a basic model shall be based on the sample and shall be less than or equal to the lower of:
  - (i) The mean of the sample, where:

$$\overline{x} = \frac{1}{n} \sum_{i=1}^{n} x_i$$

and,  $\overline{x}$  is the sample mean; n is the number of samples; and  $x_i$  is the  $i^{th}$  sample; Or.

(ii) The lower 97.5 percent confidence limit (LCL) of the true mean divided by 0.95, where:

$$LCL = \overline{x} - t_{.975} \left( \frac{s}{\sqrt{n}} \right)$$

And  $\overline{x}$  is the sample mean; s is the sample standard deviation; n is the number of samples; and  $t_{0.975}$  is the t statistic for a 97.5% one-tailed confidence interval with n-1 degrees of freedom (from Appendix A of this part).

- (b) Certification reports. (1) The requirements of §429.12 are applicable to candelabra base and intermediate base incandescent lamps; and
- (2) Pursuant to §429.12(b)(13), a certification report shall include the following public product-specific information:
- (i) Candelabra base incandescent lamp: The rated wattage in watts (W).
- (ii) Intermediate base incandescent lamp: The rated wattage in watts (W). [76 FR 12451, Mar. 7, 2011; 76 FR 24774, May 2, 2011]

## § 429.41 Electric motors. [Reserved]

## § 429.42 Commercial refrigerators, freezers, and refrigerator-freezers.

(a) Sampling plan for selection of units for testing. (1) The requirements of

- $\S429.11$  are applicable to commercial refrigerators, freezers, and refrigerator-freezers; and
- (2) For each basic model of commercial refrigerator, freezer, or refrigerator-freezer selected for testing, a sample of sufficient size shall be randomly selected and tested to ensure that—
- (i) Any value of estimated maximum daily energy consumption or other measure of energy consumption of a basic model for which consumers would favor lower values shall be greater than or equal to the higher of:
  - (A) The mean of the sample, where:

$$\overline{x} = \frac{1}{n} \sum_{i=1}^{n} x_i$$

and,  $\overline{x}$  is the sample mean; n is the number of samples; and  $x_i$  is the maximum of the i<sup>th</sup> sample;

Or

(B) The upper 95 percent confidence limit (UCL) of the true mean divided by 1.10, where: